TV-Free

Video-in-motion Interface

TF-NTG2

For Mercedes Benz
NTG 2, NTG 2.5, NTG 4 and NTG 4.5
navigation systems

Legal Information

By law, watching moving pictures while driving is prohibited, the driver must not be distracted. We do not accept any liability for material damage or personal injury resulting, directly or indirectly, from installation or operation of this product. This product should only be used while standing or to display fixed menus or rear-view-camera video when the vehicle is moving, for example the MP3 menu for DVD upgrades.

Changes/updates of the vehicle's software can cause malfunctions of the interface.   We offer free software-updates for our interfaces for one year after purchase. To receive a free update, the interface must be sent in at own cost. Labor cost for and other expenses involved with the software-updates will not be refunded.

Contents

1. Prior to installation

Read the manual prior to installation. Technical knowledge is necessary for installation. The place of installation must be free of moisture and away from heat sources.
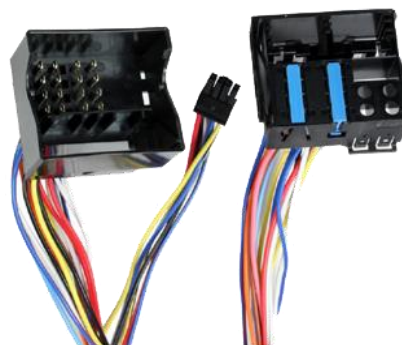
1.1. Delivery contents

Take down the SW-version and HW-version of the interface-boxes, and store this manual for support purposes!
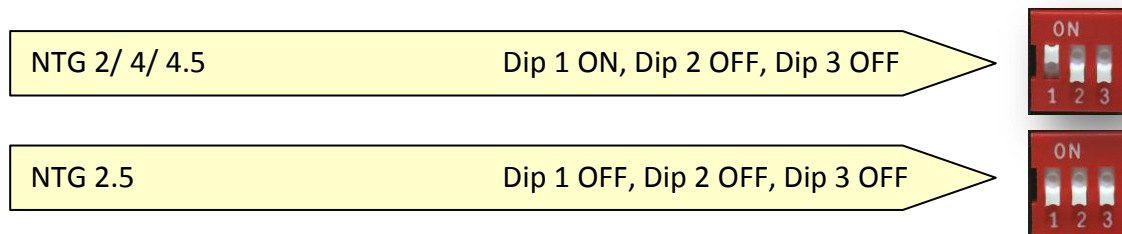
CAN-box TV-400
HW_____ SW_____

Harness
TV-NTG2

TV-FREE

MERCEDES S-CLASS(W221),
MERCEDES C-CLASS (W204),
MERCEDES E-CLASS (W212),
RANGE ROVER,
PORSCHE 911

1.2.   Check compatibility of vehicle and accessories

Requirements

Vehicle   Mercedes Benz A-Class (W169) from 09/04, B-Class (W245) from 09/04, C-Class (W203) from 04/04, CLK-Class (C209 W209) from 06/04, GL-Class (X164), ML-Class (W164) all years, R-Class (W251), Sprinter, Viano, CLS-Coupe (W219) from approx 04/08, E-Class (W211) from approx 04/08, SL-Class from approx 04/08, SLK-Class (R171) from approx 04/08, R-Class (W251) from approx 04/08, ML-Class (W164) from approx 04/08, C-Class (W204) from approx 08/08, GLK-Class (X204), E-Class (W212), E-Class Coupe (W207)

Navigation   NTG 2, NTG 2.5, NTG 4. NTG 4.5

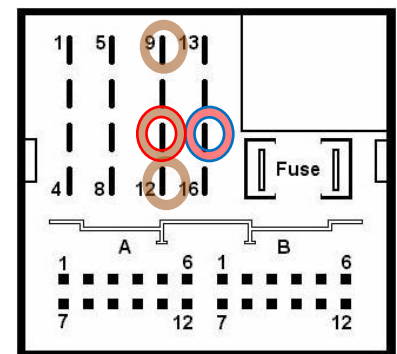## 1.3.   Setting the Dip-switches of the Can-Box TV-400

| NTG 2/ 4/ 4.5 | Dip 1 ON, Dip 2 OFF, Dip 3 OFF |

| NTG 2.5 | Dip 1 OFF, Dip 2 OFF, Dip 3 OFF |

1.4.   Pin-assignments

Pin-assignment vehicle connector

Cable colour	Assignment
●● Red/Blue	+12Volt Permanent 15
● Brown	Ground Pin 12
●● Brown/Red	CAN HIGH Pin 11
● Brown	CAN LOW Pin 9

Pin-assignment of the CAN-Box TV-400 (Molex 8pin)

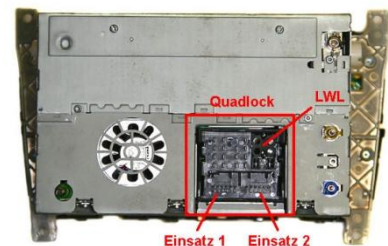| Cable colour	Assignment
● Red	+12Volt Permanent Pin 4
● Black	Ground Pin 8
● Yellow	CAN HIGH Navi Pin 1
● Blue	CAN LOW Navi Pin 2
●● Yellow/Black	CAN High Vehicle Pin 5
●● Blue/Black	CAN Low Vehicle Pin 6

2. Installation

Switch off ignition and disconnect the vehicle's battery! If according to factory rules disconnecting the battery has to be avoided, it is usually sufficient to put the vehicle is sleep-mode. In case the sleep-mode does not show success, disconnect the battery with a resistor lead.

Instruction for vehicles with NTG2:

1. Remove all covers of the navigation computer.

2. Remove the 4 screws of the navigation computer and pull it out.

3. RemoveQuadlock connector from the navigation computer and connect it to Harness TV-NTG2.

4. Remove the both 12pin inserts from the original Quadlock connector and connect them together with the optical leads to the Harness TV-NTG2. Connect the TV-NTG2 to the navigation computer.
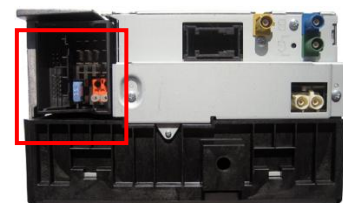

NTG2

Instruction for vehicles with NTG2.5:

1. Remove the navigation computer from the centre console.

2. RemoveQuadlock connector from the navigation computer and connect it to Harness TV-NTG2.

3. Remove the both 12pin inserts from the original Quadlock connector and connect them together with the optical leads to the Harness TV-NTG2. Connect the TV-NTG2 to the navigation computer.

NTG2.5
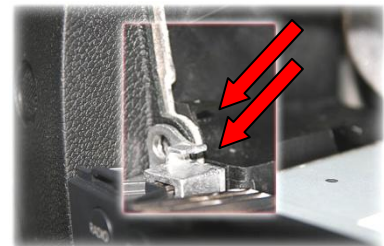
TF-NTG2

Instructions for vehicles with NTG4:

1. Remove the centre air nozzle unit with the accordant tool kit.
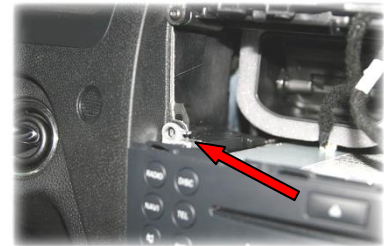

2. Remove both TORX-screws.

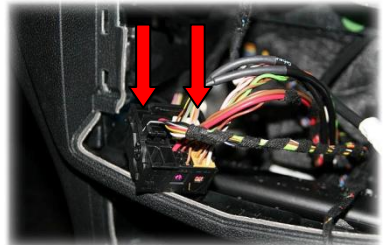
3. Slide upward the interlock behind the removed TORX screws and pull out the navigation computer.
   (In the right picture the interlock is closed!)

….In this picture the interlock is open.

4. Remove Quadlock connector from the navigation computer and connect it to Harness TV-NTG2.

5. Remove the both 12pin inserts from the original Quadlock connector and connect them together with the optical leads to the Harness TV-NTG2. Connect the TV-NTG2 to the navigation computer.

6. Remove twin Fakra connector (GPS, Bluetooth) from the navigation computer and connect it to the female Fakra connector of harness TV-NTG2. Connect the twin Fakra connector of harness TV-NTG2 to the navigation computer.

3. Activation of the video-in-motion function

On vehicles with **NTG 2/4/4.5** the video-in-motion function is activated permanently without disturbing the navigation performance.
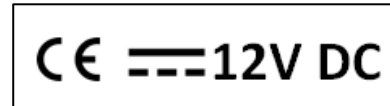
On vehicles with **NTG 2.5** select the "navigation level" on the instrument and press the "hang-up"-button on the steering-wheel for more than 3 seconds to activate/deactivate the video-in-motion function. When the ignition is off, the video-in-motion interface will be automatically disabled.

Note: *As long as the video-in-motion function is activated, the navigation of the command **will NOT be working***!

4. Specifications

Operation voltage	10.5 – 14.8V
Stand-by power drain	>1mA
Operation power drain	~60mA
Power consumption	~0,72W
Temperature range	-30°C bis +80°C
Weight	44g
Measurements (box only) B x H x T	70 x 20 x 47 mm

5. Technical support

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